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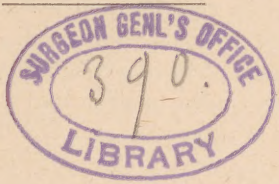

THE TREATMENT OF HIP DISEASE.*

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In this short paper it is not my intention to describe any particular forms of braces, or to advocate the use of any special apparatus, but rather to speak of general principles of treatment that can be carried out by any general practitioner. I will consider the subject under the following heads:

1. General or constitutional treatment.
2. Local protection to the diseased joint.
3. Treatment of abscesses.
4. Correction of deformity.
5. Excision.

In the first place, we will assume that a correct diagnosis has been made, and, while in the majority of cases I do not believe a differential diagnosis can be made between the femoral and acetabular varieties, yet the principles of treatment are the same.

In the large majority of cases the disease is of tubercular origin; and, while tuberculosis of bone may not be as fatal to life as tuberculosis of the pulmonary tissues, yet in most cases too little attention is paid to hygienic sur-

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roundings and to constitutional treatment. In many instances a brace is applied and nothing further done. An out-of-door life is of great advantage, and if climatic influences are of any value in pulmonary phthisis, they should also be of use in tubercular osteitis. The improvement in some children by even a short trip to the seaside or the mountains is often very marked, and may in some cases be followed by a favorable change in all the symptoms of the disease. At the Hospital for the Ruptured and Crippled during the summer months the children are sent to Summit, N. J., Bath Beach, Long Island, and Saratoga; and children that have left the hospital in very poor physical condition have, in nearly all instances, been greatly improved. They are weighed before going and on return, and we have found the gain in body weight to average about five pounds for the two months' stay, and that even after the return the improvement continues. They sleep and eat better; in some, sinuses that had discharged profusely for many months have closed, and the change of air seems of the greatest benefit.

In addition to good hygiene, cod-liver oil is a most useful remedy and should be used in nearly all cases. Tonics should be employed where appetite is poor or the child anæmic. Tablets of albuminate of iron, or iron and strychnine, seem to be as useful as any of the various tonics. Other preparations may be made up to suit individual patients, or to suit the views of various practitioners; but I would strongly urge that in all cases constitutional treatment be not neglected.

Local Protection to the Diseased Joint.—Two methods of treatment are possible to protect the inflamed joint—one by complete rest in the recumbent position, either with or without the use of any apparatus, and the other by allowing the patient to go about, and keeping the limb more or less

completely immobilized by means of a brace. The combination of both methods promises the best results. If the disease is very acute, rest in bed is of the utmost importance, and the patient should be kept flat on the back. In very young children this can be done by placing them on a frame or cuirass. Extension can be made either by Buck's method or by means of a brace. By this method absolute protection is afforded the joint, and the only question to be considered is whether the general health is being impaired by the confinement to bed. In most cases the children do remarkably well, and in Europe many children are kept thus on the back for the entire course of the disease, and retain their general health in a very marked degree. After the acute symptoms have subsided, patients may, however, with advantage be allowed to go about; and, with a properly applied splint, either with or without the use of crutches, in the majority of cases do well. Crutches are of great assistance and render more perfect the protection to the joint, and the extension is much more satisfactorily kept up, no matter what form of splint is used. If during treatment an exacerbation occurs, by putting the child to bed for a few weeks until it has subsided the subsequent course of the disease will usually be much more favorable. The joint should be protected until all signs of disease have disappeared. Never remove the apparatus while reflex spasm is present. Never do away with the brace while abscesses or sinuses exist, and remember that, in the average case without complications, the joint should be protected for at least eighteen months. The mistake of leaving a brace on too long is much less often made than of taking it off too soon.

The Treatment of Abscesses.—In considering this part of the subject I believe we must recognize a difference between the abscesses of hip disease and those of Pott's disease, for in the latter, so long as the abscess causes no

symptoms, it can be safely left alone; and if treated by aspiration, either with or without the use of injections of iodoform and oil, in about fifty per cent. of the cases the fluid contents will be absorbed and only a cheesy mass remain. Abscesses within the pelvis are hard to drain; sepsis usually follows sooner or later after they are opened, the original source of the disease can not be reached, and the more abscesses of Pott's disease one sees, the less anxious he is to resort to radical operations. About the hip, however, abscesses are usually near the surface; they generally interfere with the proper application of a brace; they have a tendency to dissect between the muscles, to destroy tissue which, when healing occurs, may cause interference with free muscular movements, and, by proximity to important blood-vessels, may cause danger from hæmorrhage. In small abscesses, removal by aspiration and the injection into the sac of iodoform and oil may give good results; but if this fail, and in all large abscesses, the best plan of treatment, I believe, is to freely open, thoroughly scrape with a Volkmann spoon, dust well with iodoform, and endeavor to get healing by first intention. If when the abscess is opened the sinus leading to bone can be found, it should be scraped and any diseased bone also removed. If the bone is found markedly diseased—the head separated, for instance, from the shaft—a more or less complete excision should be done and thorough drainage established. The incision should be in most instances the full length of the abscess, and I have seen incisions of twelve and fourteen inches on the thigh in children with hip abscesses heal by primary union and the patient progress from that time on much more favorably. Where sinuses exist after abscesses, they should be thoroughly scraped and packed with gauze impregnated with iodoform, guiacol, balsam of Peru, or some such substance.

Correction of Deformity.—It must be clearly understood

that our aim in treatment is to prevent deformity; but as deformity is one of the early symptoms and we rarely see the patients prior to its occurrence, the problem of how best to correct it is all-important. We have the choice of four methods:

1. Rest in bed with extension by weight and pulley or brace.

2. Complete immobilization of the joint by brace or plaster of Paris.

3. Forcible correction without an anæsthetic, as by use of the Thomas splint.

4. Correction under an anæsthetic.

The first method is the best where symptoms are acute, and whether we use a weight and pulley or brace, the extension must be made in the line of the deformity. A convenient way of accomplishing this is to place the affected lower extremity upon an inclined plane and allow the weight to hang over the foot of the bed, the pulley being fastened to an upright. If the weight of the body does not produce sufficient counter-extension, a band may be made to pass under the pelvis to the head of the bed or under the armpits to the head of the bed. If a splint is used, the inclined plane will also be of service, although, of course, traction is made by splint. As reflex spasm subsides and deformity decreases, the inclined plane may be lowered until finally the limbs can be brought down flat and parallel without any tilting of the pelvis.

The second method is applicable in patients who can not for various reasons have bed treatment, and consists in completely immobilizing the joint at the angle of deformity and allowing the plaster of Paris or the splint to remain on for several weeks, then taking it off and reapplying in the most favorable position. By this method I have seen ten and fifteen degrees of deformity corrected at each applica-

tion of the plaster or brace until, finally, the limb was straightened completely.

The third method consists in the application of a posterior brace fastened to the body above and to the leg below, and, by forcibly bending the brace which firmly presses against the hip, to forcibly overcome the deformity. No traction is used, and, unless great care is exercised, much damage may be done to the joint. This method is not much in use at the present day.

The fourth method also must be used with great caution; but if during the administration of the anæsthetic the limb be carefully held to prevent any traumatism occurring, and, after the reflex spasm has disappeared, if the limb can be brought down straight without the employment of much force, no damage will be done to the joint; but it is a method that should not be used indiscriminately. When the limb is brought down straight it is held there by means of plaster of Paris or a brace.

In cases where all acute symptoms have subsided and the disease is cured, but with deformity, if this is excessive it should be corrected by operation. Under an anæsthetic, effort is first made to overcome the flexion or adduction by means of tenotomies of resistant muscles or by division of shortened fascia and skin. If this fails, an osteotomy below the trochanter minor is indicated. This operation is useful whether we have ankylosis or motion at the joint. The limb is put up in plaster of Paris or a brace and held firmly until union of the fracture occurs, when the patient is allowed to go about, the limb being supported by a suitable brace. This is an extremely satisfactory operation, especially where the deformity is excessive, for, by overcoming the flexion, patients are cured of the troublesome lordosis and several inches in length added to the limb, and the lameness thereby much diminished.

Excision of the Hip.—In my opinion, except in rare instances, excision should be resorted to only in cases where abscesses are extensive, destruction of bone is great, or the life of the patient endangered by excessive suppuration or amyloid changes. König, in a recent article, states that four fifths of all patients with tubercular joint disease have also other forms of tubercular disease. This is probably too high; but one of the principal arguments in favor of excision has been much weakened since it is now known that but rarely is the bone lesion the only focus, and that but a very small percentage of cases of bone tuberculosis develop general tuberculosis. The results of proper and efficient conservative treatment are so good that excisions are rarely done to-day in early cases.

Much more could be said on the subject of the treatment of hip disease, but I have endeavored to speak only of a few general principles that we should have in mind in treating any case. There is one point, however, I would like to emphasize—namely: be sure, if possible, to overcome all deformity before applying a walking brace, for, if not, a deformity will increase and become permanent; and if the case is seen after deformity has occurred, let the first object be to properly protect the inflamed joint, and, secondly, overcome the deformity.